PAGE 1	READRT SRC	
1 2 3 4 5	/ SUBROUTINE READRT / LINKAGE: CALL READRT(ROUTES(POINTER), ROOT(1), EOROUT, / DELIND, POINTER, CONNEX(1), EOCONN) / IF DELIND =0 READ OUT IS DESTRUCTIVE. / ON EXIT ACC. CONTAINS STATUS BIT (0 INVALID, 1 VALID)	29. Jan 1975 29.A3 k 1975

```
READRT
PAGE
                  READRT SRC
                                                         .TITLE READRT
     6
                                                             .GLOBL READRT, .DA
                                                            READRT XX
                      00000 R 740040 A
                     00001 R 120300 E
                                                            JMS* .DA
                                                            JMP .+1+7
ROUTAD Ø
                     00002 R 600012 R
   10
                     00003 R 000000 A
   11
                 00003 K 000000 H
00004 R 000000 A
00005 R 000000 A
00006 R 000000 A
00010 R 000000 A
                                                            ROOTAD 0
   12
                                                            EORAD 0
   13
                                                            INDAD 0
   14
                                                            PTADD 0
   15
             00007 R 000000 A
00010 R 000000 A
00011 R 000000 A
00012 R 140276 R
00013 R 740277 R
00015 R 200003 R
00016 R 340301 R
00017 R 060302 R
00020 R 040003 R
00021 R 200003 R
00022 R 340301 R
00022 R 340301 R
00022 R 340301 R
00023 R 640512 A
00024 R 220010 A
00025 R 741100 A
00026 R 140277 R
00037 R 040211 A
00033 R 040271 R
00033 R 040271 R
00033 R 040271 A
00034 R 200305 R
00035 R 500305 R
00037 R 060011 A
00042 R 200305 R
00042 R 200305 R
00044 R 240201 A
00044 R 040266 R
00044 R 040270 R
00044 R 040271 R
00044 R 040271 R
00044 R 040271 R
00044 R 040271 R
                                                            CONNAD Ø
   16
                                                            EOCADD 0
   17
   18
                                                             DZM COUNT#
   19
                                                              CLC
                                                              DAC STAT#
   20
   21
                                                              LAC ROUTAD
   ŽŽ.
                                                              TAD (-1
   23
                                                              DAC* (10 / ROUTES(POINTER-1) ADDR
   24
                                                              DAC RSTART
   25
                                                              LAC ROOTAD
   26
                                                              TAD (-1
   27
                                                              DAC* (11 / ROOT(0) ADDR
   28
                                                              LAC* 10
   29
                                                              SPA
   30
                                                              DZM STAT
   31
                                                              DAC DUMP
                                                              LRS 12 / SHIFT 10
AND (77 / 6 BITS
   34
                                                              DAC* 11 / NO OF POINTS
   35
                                                              DAC NPOINTS
   36
37
38
                                                              LAC DUMP
                                                              AND (1777 / 10 BITS
                                                              DAC X1
   39
                                                              DAC* 11
                                                              LAC* 10
   40
   41
                                                              DAC GAPP
   42
                                                              AND (1777 / 10 BITS
   43
                                                              DAC* 11
                                                              DAC YI
   44
                                                              LAC NPOINTS
   45
   46
                                                              CMA
   47
                                                              TAD (2 / -NO OF SEGS
                                                              DAC NPOINTS
   48
                    00050 k 040271 k
00051 R 440276 R
00052 R 220010 A
00053 R 040265 R
00054 R 740100 A
00055 R 600060 R
00056 R 200276 R
                                                            LOOP ISZ COUNT
   49
                                                             LAC* 10
   50
   51
                                                              DAC DUMP
                                                              SMA
                                                              JMP .+3
                                                             LAC COUNT
DAC STAT
   54
                   00060 R 200265 R
                                                             LAC DUMP
                   - 00061 R 640516 A
                                                             LRS 16
```

```
READRT SRC
                                                                                                              READRT
PAGE
                                             00062 R 500307 R
00063 R 060011 A
                                                                                                                                   AND 7
                                                                                                                                  DAC* 11 / SIDE
       59
                   00064 R 200265 R 200265 R 200265 R 200265 R 240514 A 200265 R 340272 R 240272 R 240272 R 240272 R 240270 R 240270 R 240200 A 200272 R 200265 R 200265 R 200265 R 200265 R 200272 R 200265 R 200272 R 200265 R 200273 R 200274 R 200267 R 220010 A 20077 R 220010 A 200101 R 200267 R 200270 R 200102 R 200267 R 200266 R 200267 R 200267 R 200266 R 200267 R 200266 R 200267 R 200266 R 200267 R 200267 R 200266 R 200267 R 200266 R 200267 R 200266 R 200267 R 200267 R 200266 R 200267 R 20026
                                                                                                                                 LAC DUMP
      60
                                                                                                                                 LRS 14
      61
                                                                                                                                  AND (3
       62
                                                                                                                                  DAC MODE / TYPE OF SEGMENT
      63
                                                                                                                                  XOR (3
       64
      65
                                                                                                                                  SZA
                                                                                                                                  JMP XORY / NOT XY ROUTE
       66
                                                                                                                                 LAC DUMP
AND (1777 / AND:L 1023
       67
       68
                                                                                                                                 DAC* 11
       69
      70
                                                                                                                                 DAC X1
                                                                                                                                 LAC* 10
      71
72
73
74
75
76
77
                                                                                                                                  DAC* 11
                                                                                                                                  DAC Y1
                                                                                                                                  JMP FINISH
                                                                                                                               XORY LAC MODE
                                                                                                                                  AND (1
                                                                                                                                   SZA
       78
                                                                                                                                   JMP MODE1 ✓ MODE=1
      79
-
                                                                                                                                 LAC X1
                                                                                                                                  DAC* 11
       80
                                                                                                                                 LAC DUMP
AND (1777
      81
      82
      83
                                                                                                                                  DAC* 11
                                                                                                                                 DAC Y1
       84
                                                                                                                              JMP FINISH
MODE1 LAC DUMP
AND (1777
       85
       86
       87
       88
                                                                                                                                 DAC* 11
                                                                                                                                 DAC X1
       89
                                                                                                                                 LAC Y1
       90
                                                                                                                                  DAC* 11
       91
                                                                                                                              FINISH ISZ NPOINTS
       92
                                                                                                                               JMP LOOP
       93
      94
95
                                                                                                                                 LAC* INDAD
                                                                                                                                SNA /NON DESTRUCTIVE JMP DESTR
       96
                                                                                                                                 LAC STAT
       97
      98
                                                                                                                                 CMA
                                                                                                                              JMP* READRT ✓EXIT
DESTR LAC GAPP
     99
   100
                                                                                                                              LRS 12 / SHIFT 10
AND (377 / 8 BITS
   101
   102
   103
                                                                                                                                  TCA
                                                                                                                                  DAC GAPP / HOLE SIZE IN ROUTES ARRAY
   104
                                                                                                                                  LAC RSTART
   105
                                                                                                                                DAC* (11 / ROUTES(POINTER-1)
LAC* EORAD / EOROUT
   106
   107
    108
                                                                                                                                 TAD GAPP
   109
                                                                                                                                  CMA
```

```
READRT SRC
                                        READRT
PAGE
 110
                 00146 R 360007 R
                                                TAD* PTADD
                 00147 R 040271 R
                                               DAC NPOINTS / -(NO OF WORDS TO COPY + 1 )
 111
                                              RPACK LAC* 10
112
                 00150 R 220010 A
 113
                 00151 R 060011 A
                                               DAC* 11
                 00152 R 440271 R
00153 R 600150 R
                                               ISZ NPOINTS / SKIP WHEN DONE
 114
                                               JMP RPACK
 115
 116
                                               START UPDATING CONNEX ARRAY
 117
 118
                                               LAC* EORAD
 119
                 00154 R 220005 R
                00155 R 340266 R
                                               TAD GAPP
 120
                00156 R 060005 R
                                               DAC* EORAD
 121
 122
                00157 R 220007 R
                                               LAC* PTADD
 123
                00160 R 040273 R
00161 R 740031 A
                                               DAC PPLUS / POINTER
                                               TCA
 124
             00162 R 740031 H
00162 R 040274 R
00163 R 220011 R
00164 R 740001 A
00165 R 340306 R
00166 R 040271 R
                                               DAC PMIN / - POINTERD
 125
                                               LAC* EOCADD
 126
 127
                                               CMA
                                               TAD (2
 128
                                               DAC NPOINTS / - CONNEX ARRAY SIZE
 129
            00166 R 040271 R
00167 R 741200 A
00170 R 600224 R
00171 R 220010 R
00172 R 500313 R
00173 R 740031 A
00174 R 040275 R
00175 R 4400271 R
 130
                                               SNA
 131
                                               JMP CENDS
 132
                                              CLUP LAC* CONADD
 133
                                               AND (777
                                               TCA
 134
 135
                                               DAC NOFCH / - NO OF CONNS
                                              LUPC ISZ CONADD /SCAN CONNEXIONS
               00175 R 440010 R
00176 R 440271 R
00177 R 440271 R
00200 R 440271 R
00201 R 220010 R
00202 R 220010 R
00203 R 652000 A
00204 R 440010 R
00205 R 220010 R
00206 R 744010 A
00210 R 640614 A
00211 R 500314 R
00212 R 340274 R
00213 R 741200 A
00214 R 600227 R
 136
 137
                                              ISZ NPOINTS
                                                ISZ NPOINTS
 138
                                               ISZ NPOINTS
 139
                                               ISZ CONADD
 140
                                               LAC* CONADD
 141
 142
                                               LMQ / = MOVE 18 RIGHT
                                               ISZ CONADD
 143
 144
                                               LAC* CONADD
                                               CLL!RAL
 145
                                               RTL
 146
                                               LLS 14 / SBL 12
AND (37777 / 14 BITS
 147
 148
                                               TAD PMIN
 149
                                               SNA / NON ZERO
JMP THISUN / ACTUAL ROUTE
 150
 151
                00215 R 740100 A
00216 R 600242 R
00217 R 440275 R
 152
                                                SMA / AC-VE
                                              JMP UPDATE
RETUN ISZ NOFCN
 153
 154
                00220 R 600175 R
 155
                                               JMP LUPC
                 00221 R 440010 R
 156
                                               ISZ CONADD
                00222 R 440271 R
00223 R 600171 R
                                                ISZ NPOINTS
 157
                                               JMP CLUP
 158
                 00224 R 200277 R
                                              CENDS LAC STAT
 159
                 00225 R 740001 A
                                               CMA
 160
                 00226 R 620000 R
                                               JMP* READRT
 161
```

```
PAGE
                       READRT SRC
                                                         READRT
                                                                  THISON LAC* CONADD
 162
                        00227 R 220010 R
                                                                   AND (177777 / 16 BITS
                        00230 R 500315 R
 163
                                                                   DAC* CONADD
                        00231 R 060010 R
 164
                        00232 R 200301 R
00233 R 340010 R
                                                                   LAC (-1
 165
                  00232 K 200301 K 00233 R 340010 R 00233 R 340010 R 00235 R 200010 R 00236 R 500304 R 00237 R 060010 R 00240 R 340273 R 00242 R 340266 R 00242 R 340266 R 00244 R 040010 R 00245 R 640010 R 00251 R 641002 A 00252 R 640010 R 00253 R 200006 R 00255 R 500316 R 00255 R 500316 R 00256 R 640010 R 00257 R 440010 R 00257 R 440010 R 00257 R 440010 R 00257 R 500315 R 00260 R 640002 A 00261 R 500315 R 00260 R 640002 A 00261 R 500315 R 00261 R 500315 R 00261 R 500316 R 00261 R 500316 R 00261 R 500315 R 00262 R 640002 A 00263 R 600217 R 000010 R 00261 R 500010 R
                                                                   TAD CONADD
 166
                                                                   DAC CONADD
 167
                                                                   LAC* CONADD
 168
                                                                    AND (77
 169
                                                                   DAC* CONADD / PTR=0
ISZ CONADD
 170
 171
                                                                 JMP RETUN
UPDATE TAD PPLUS
 172
 173
                                                                   TAD GAPP / NEW ROUTES POINTER
 174
                                                                   DAC INDAD
 175
 176
                                                                   LRS 14
                                                                   LAC CONNAD
 177
 178
                                                                    TAD (-1
 179
                                                                    DAC CONNAD
                                                                   LACQ
 180
 181
                                                                   DAC* CONNAD
                                                                   LAC INDAD
 182
 183
                                                                   LLS 4
                                                                    AND (600000
 184
 185
                                                                   LMQ
 186
                                                                   ISZ CONNAD
                                                                   LAC* CONNAD
 187
                                                                   AND (177777
 188
                                                                   OMQ
 189
                                                                   DAC* CONNAD
  190
 191
                                                                   JMP RETUN
                                                                 CONADD=CONNAD
 192
                                        000003 R
                                                                  RSTART=ROUTAD
 193
                       00265 R 740040 A
00266 R 740040 A
                                                                 DUMP XX
GAPP XX
 194
 195
                       00266 R 740040 A
00267 R 740040 A
00270 R 740040 A
00271 R 740040 A
00272 R 740040 A
00273 R 740040 A
00274 R 740040 A
00275 R 740040 A
00300 R 000300 E *E
00301 R 777777 A *I
 196
                                                                 \times 1 \times \times
 197
                                                                 Y1 XX
 198
                                                                 NPOINTS XX
 199
                                                                 MODE XX
                                                                 PPLUS XX
 200
                                                                 PMIN XX
 201
                                                                 NOFCH XX
 202
                                                                    .END
 203
                        00301 R 777777 H *L
00302 R 000010 A *L
00303 R 000011 A *L
00304 R 000077 A *L
00305 R 001777 A *L
                        00306 R 000002 A *L
00307 R 000007 A *L
                        00310 R 000003 A *L
                        00311 R 000001 A *L
```

PHGE 6 READRT SRC READRT

00312 R 000377 A *L
00313 R 000777 A *L
00314 R 037777 A *L
00315 R 177777 A *L
00316 R 600000 A *L
SIZE=00317 NO ERROR LINES

PAGE	7 REA	ADRT CRO	SS REFI	ERENCE					
CENDS CLUP CONADD	00224 00171 000010	131 132* 132 164	159* 158 136 166	140 167	141 168	143 170	144 171	156 192*	162
CONNAD COUNT DESTR	00010 00276 00134	16* 16* 18 96	177 49 100*	179 54	181	186	187	190	192
DUMP	00265	31 194*	36	51	56	60	67	81	86
EOCADD EORAD FINISH	00011 00005 00124	17* 13* 74	126 107 85	119 92*	121				
GAPP INDAD LOOP LUPC	00124 00266 00006 00051 00175	41 14* 49* 136*	100 94 93 155	104 175	108 182	120	174	195*	
MODE MODE1	00272 00116	63 78	75 86*	199*					
NOFCH NPOINT	00275 00271	135 35 138	154 45 139	202* 48 157	92 198*	111	114	129	137
PMIN PPLUS PTADD	00274 00273 00007	125 123 15*	149 173 11 <u>0</u>	201* 200* 122	0.0	404			
READRT RETUN ROOTAD	00000 00217 00004	6 154* 12*	7 172 25	8* 191	99	161			
ROUTAD RPACK RSTART	00003 00150 0 00003	11* 112* 24	21 115 105	193 193*					
STAT THISUN	00277 00227	20 151	30 162*	55	97	159			
UPDATE XORY X1 Y1 .DA	00242 00103 00267 00270 00300	153 66 38 44 7	173* 75* 70 73 9	79 84	89 90	196* 197*			